

**METHOD FOR INERT GAS WELDING OR INERT GAS SOLDERING OF
WORKPIECES COMPRISING IDENTICAL OR DIFFERENT METALS OR METAL
ALLOYS BY MEANS OF AN ADDITIONAL ZN/AL METAL**

Abstract of the Invention

The invention relates to a method for inert gas welding or inert gas soldering of workpieces (A) made of steel, aluminum, magnesium, copper, or the alloys thereof with workpieces (B) made of steel, aluminum, magnesium, copper, or the alloys thereof by using an additional molten metal alloy, workpieces (A) and (B) being made of identical or different metals or metal alloys. The inventive method is characterized by the following steps: a) the workpieces that are to be connected are contacted edge to edge or in an overlapping manner; b) the additional metal alloy containing a Zn/Al alloy is fused; c) the additional molten metal alloy is applied to the contact points or partial areas of the contact points of the contacted workpieces; d) the connected workpieces are cooled. Steps b) and c) are carried out immediately after one another while at least steps b) and c) are carried out by using an inert gas. The invention further relates to a wire that is used in said method.